

Wastewater Discharge Monitoring Long Report
For DNR Use Only

Facility Name: HEART OF VALLEY MSD WW TRTMNT FAC
 Contact Address: 801 Thilmany Road
 Kaukauna, WI 54130
 Facility Contact: Glen Geurts, District Director
 Phone Number: (920) 766-5731
 Reporting Period: 07/01/2015 - 07/31/2015
 Form Due Date: 08/21/2015
 Permit Number: 0031232

Date Received:
 DOC: 347752
 FIN: 6375
 FID: 445005220
 Region: Northeast Region
 Permit Drafter: Richard P Sachs
 Reviewer: Mark K. Corbett
 Office: Oshkosh

	Sample Point	701	001	701	701	701
	Description	Influent	Effluent	Influent	Influent	Influent
	Parameter	211	211	66	457	87
	Description	Flow Rate	Flow Rate	BOD5, Total	Suspended Solids, Total	Cadmium, Total Recoverable
	Units	MGD	MGD	mg/L	mg/L	ug/L
	Sample Type	CONTINUOUS	CONTINUOUS	24 HR FLOW PROP	24 HR FLOW PROP	24 HR FLOW PROP
	Frequency	DAILY	DAILY	5/WEEK	5/WEEK	MONTHLY
Sample Results	Day 1	4.735	1.976	168	172	
	2	4.308	3.061	246	244	
	3	4.068	3.304	190	172	
	4	3.673	2.908	180	188	
	5	4.320	3.287	184	188	
	6	4.474	1.458	199	236	
	7	4.492	1.392	207	192	<1.0
	8	4.268	1.311	202	216	
	9	4.433	1.375	204	216	
	10	4.205	1.079	245	236	
	11	4.014	0.888	255	260	
	12	4.233	1.109	192	260	
	13	4.821	1.713	260	244	
	14	4.678	1.546	220	240	
	15	4.486	1.262	221	212	
	16	4.263	1.033	193	208	
	17	4.320	1.217	205	204	
	18	5.157	2.054	207	206	
	19	4.763	1.660	199	184	
	20	4.520	1.357	181	236	
	21	4.380	0.891	194	256	
	22	4.400	1.093	216	244	
	23	4.300	1.051	220	212	
	24	4.110	0.861	202	204	
	25	3.790	0.562	177	192	
	26	4.131	0.963	222	260	
	27	3.938	0.599	230	236	
	28	3.974	0.555	210	252	
	29	3.730	0.321	260	380	
	30	3.837	0.395	235	260	
	31	3.657	0.582	209	220	

	Sample Point	701	001	701	701	701
	Description	Influent	Effluent	Influent	Influent	Influent
	Parameter	211	211	66	457	87
	Description	Flow Rate	Flow Rate	BOD5, Total	Suspended Solids, Total	Cadmium, Total Recoverable
	Units	MGD	MGD	mg/L	mg/L	ug/L
Summary Values	Monthly Avg	4.273483871	1.382677419	210.741935484	226.774193548	0
	Daily Max	5.157	3.304	260	380	<1
	Daily Max - Variable					
	Daily Min	3.657	0.321	168	172	<1
	Geometric Mean					
	Week 1 Avg					
	Week 2 Avg					
	Week 3 Avg					
	Week 4 Avg					
Limit(s) in Effect	Monthly Avg					
	Daily Max					
	Daily Max - Variable					
	Daily Min					
	Geometric Mean					
	Weekly Avg					
QA/QC Information	LOD					1
	LOQ					5
	QC Exceedance	N	N	Y	N	N
	Lab Certification			445005220	445005220	405132750

	Sample Point	701	701	701	701	701
	Description	Influent	Influent	Influent	Influent	Influent
	Parameter	133	147	264	315	553
	Description	Chromium, Total Recoverable	Copper, Total Recoverable	Lead, Total Recoverable	Nickel, Total Recoverable	Zinc, Total Recoverable
	Units	ug/L	ug/L	ug/L	ug/L	ug/L
	Sample Type	24 HR FLOW PROP	24 HR FLOW PROP	24 HR FLOW PROP	24 HR FLOW PROP	24 HR FLOW PROP
	Frequency	MONTHLY	MONTHLY	MONTHLY	MONTHLY	MONTHLY
Sample Results	Day 1					
	2					
	3					
	4					
	5					
	6					
	7	6	75.4	4.3	4.4	138
	8					
	9					
	10					
	11					
	12					
	13					
	14					
	15					
	16					
	17					
	18					
	19					
	20					
	21					
	22					
	23					
	24					
	25					
	26					
	27					
	28					
	29					
	30					
	31					

	Sample Point	701		701		701		701		701	
	Description	Influent		Influent		Influent		Influent		Influent	
	Parameter	133		147		264		315		553	
	Description	Chromium, Total Recoverable		Copper, Total Recoverable		Lead, Total Recoverable		Nickel, Total Recoverable		Zinc, Total Recoverable	
	Units	ug/L		ug/L		ug/L		ug/L		ug/L	
Summary Values	Monthly Avg	6		75.4		4.3		4.4		138	
	Daily Max	6		75.4		4.3		4.4		138	
	Daily Max - Variable										
	Daily Min	6		75.4		4.3		4.4		138	
	Geometric Mean										
	Week 1 Avg										
	Week 2 Avg										
	Week 3 Avg										
	Week 4 Avg										
Limit(s) in Effect	Monthly Avg										
	Daily Max										
	Daily Max - Variable										
	Daily Min										
	Geometric Mean										
	Weekly Avg										
QA/QC Information	LOD	1.5		3.4		1.6		1.3		5.8	
	LOQ	5		10		7.5		10		40	
	QC Exceedance	N		N		N		N		N	
	Lab Certification	405132750		405132750		405132750		405132750		405132750	

	Sample Point	001	001	001	001	001
	Description	Effluent	Effluent	Effluent	Effluent	Effluent
	Parameter	649	457	377	204	112
	Description	CBOD5	Suspended Solids, Total	pH Field	Fecal Coliform	Chlorine, Total Residual
	Units	mg/L	mg/L	su	#/100ml	ug/L
	Sample Type	24 HR FLOW PROP	24 HR FLOW PROP	GRAB	GRAB	GRAB
	Frequency	DAILY	5/WEEK	5/WEEK	WEEKLY	5/WEEK
Sample Results	Day 1	7	11	7.7		<100
	2	5	14	7.6		<100
	3	4	14	7.6		<100
	4	3	14	7.6		
	5	6	11	7.8		
	6	4	16	7.7		<100
	7	4	20	7.6	1120	<100
	8	8	21	8.1		<100
	9	5	30	7.7		<100
	10	5	26	7.8		<100
	11	4	18	7.8		
	12	9	21	7.3		
	13	13	27	7.6	2	<100
	14	14	21	7.8		<100
	15	16	23	7.6		<100
	16	14	24	7.5		<100
	17	6	18	7.8		<100
	18	4	21	7.8		
	19	11	23	7.3		
	20	6	18	7.6	47	<100
	21	5	25	7.5		<100
	22	6	20	8.0		<100
	23	8	18	7.9		<100
	24	4	20	7.7		<100
	25	5	20	7.6		
	26	8	17	7.6		
	27	6	25	7.6	95	<100
	28	7	18	7.6		<100
	29	7	22	7.6		<100
	30	8	14	7.6		<100
	31	5	21	7.3		<100

	Sample Point	001		001		001		001		001	
	Description	Effluent		Effluent		Effluent		Effluent		Effluent	
	Parameter	649		457		377		204		112	
	Description	CBOD5		Suspended Solids, Total		pH Field		Fecal Coliform		Chlorine, Total Residual	
	Units	mg/L		mg/L		su		#/100ml		ug/L	
Summary Values	Monthly Avg	7		19.709677419		7.65483871		316		0	
	Daily Max	16		30		8.1		1120		<100	
	Daily Max - Variable										
	Daily Min	3		11		7.3		2		<100	
	Geometric Mean							56.236381749			
	Week 1 Avg	4.714285714		14.285714286							
	Week 2 Avg	8.285714286		23.428571429							
	Week 3 Avg	8.857142857		21.714285714							
	Week 4 Avg	6.285714286		19.714285714							
Limit(s) in Effect	Monthly Avg	25	0	30	0						
	Daily Max					9	0			38	0
	Daily Max - Variable										
	Daily Min					6	0				
	Geometric Mean							400	0		
	Weekly Avg	40	0	45	0						
QA/QC Information	LOD									100	
	LOQ									100	
	QC Exceedance	Y		N		N		N		N	
	Lab Certification	445005220		445005220							

	Sample Point	001	001	001	001	001
	Description	Effluent	Effluent	Effluent	Effluent	Effluent
	Parameter	388	789	87	133	147
	Description	Phosphorus, Total	Nitrogen, Ammonia (NH3-N) Total	Cadmium, Total Recoverable	Chromium, Total Recoverable	Copper, Total Recoverable
	Units	mg/L	mg/L	ug/L	ug/L	ug/L
	Sample Type	24 HR FLOW PROP	24 HR FLOW PROP	24 HR FLOW PROP	24 HR FLOW PROP	24 HR FLOW PROP
	Frequency	5/WEEK	5/WEEK	MONTHLY	MONTHLY	MONTHLY
Sample Results	Day 1	0.47	0.4			
	2	0.59	0.5			
	3	0.54				
	4	0.59				
	5	0.52	0.4			
	6	0.43	0.3			
	7	0.60	0.3	<1.0	<1.5	6.1
	8	0.70	0.3			
	9	0.52	0.4			
	10					
	11					
	12	0.51	0.3			
	13	0.57	0.2			
	14	0.51	0.5			
	15	0.72	0.2			
	16	0.61	0.3			
	17	0.48				
	18	0.27				
	19	0.54	0.2			
	20	0.32	0.2			
	21	0.49	0.4			
	22	0.52	0.6			
	23	0.49	0.6			
	24	0.48				
	25	0.49				
	26	0.45	0.4			
	27	0.47	0.7			
	28	0.39	0.3			
	29	0.48	0.6			
	30	0.60	0.4			
	31	0.49				

	Sample Point	001		001		001		001		001	
	Description	Effluent		Effluent		Effluent		Effluent		Effluent	
	Parameter	388		789		87		133		147	
	Description	Phosphorus, Total		Nitrogen, Ammonia (NH3-N) Total		Cadmium, Total Recoverable		Chromium, Total Recoverable		Copper, Total Recoverable	
	Units	mg/L		mg/L		ug/L		ug/L		ug/L	
Summary Values	Monthly Avg	0.511724138		0.386363636		0		0		6.1	
	Daily Max	0.72		0.7		<1		<1.5		6.1	
	Daily Max - Variable										
	Daily Min	0.27		0.2		<1		<1.5		6.1	
	Geometric Mean										
	Week 1 Avg			0.38							
	Week 2 Avg			0.34							
	Week 3 Avg			0.26							
	Week 4 Avg			0.52							
Limit(s) in Effect	Monthly Avg	1	0	4.40	0						
	Daily Max			17	0						
	Daily Max - Variable										
	Daily Min										
	Geometric Mean										
	Weekly Avg			11	0						
QA/QC Information	LOD	0.086		0.057		1		1.5		3.4	
	LOQ	0.286		0.189		5		5		10	
	QC Exceedance	N		N		N		N		N	
	Lab Certification	445005220		445005220		405132750		405132750		405132750	

	Sample Point	001	001	001	101	601
	Description	Effluent	Effluent	Effluent	Effluent Reuse	River Monitoring
	Parameter	264	315	553	671	400
	Description	Lead, Total Recoverable	Nickel, Total Recoverable	Zinc, Total Recoverable	Flow Unregulated	WLA Previous Day River Flow
	Units	ug/L	ug/L	ug/L	MGD	cfs
	Sample Type	24 HR FLOW PROP	24 HR FLOW PROP	24 HR FLOW PROP	CONTINUOUS	GAUGE STN
	Frequency	MONTHLY	MONTHLY	MONTHLY	DAILY	DAILY
Sample Results	Day 1				2.759	3305
	2				1.247	2677
	3				0.764	1998
	4				0.765	2020
	5				1.033	2044
	6				3.016	2627
	7	2.8	4.3	23.7	3.100	3188
	8				2.957	3312
	9				3.058	2751
	10				3.126	2092
	11				3.126	2050
	12				3.124	2038
	13				3.108	2172
	14				3.132	2134
	15				3.224	2051
	16				3.230	2117
	17				3.103	2189
	18				3.103	2259
	19				3.103	2270
	20				3.163	2877
	21				3.489	3466
	22				3.307	2962
	23				3.249	2176
	24				3.249	2157
	25				3.228	2119
	26				3.168	2080
	27				3.339	2034
	28				3.419	2006
	29				3.409	1956
	30				3.442	1903
	31				3.075	1710

	Sample Point	001		001		001		101		601	
	Description	Effluent		Effluent		Effluent		Effluent Reuse		River Monitoring	
	Parameter	264		315		553		671		400	
	Description	Lead, Total Recoverable		Nickel, Total Recoverable		Zinc, Total Recoverable		Flow Unregulated		WLA Previous Day River Flow	
	Units	ug/L		ug/L		ug/L		MGD		cfs	
Summary Values	Monthly Avg	2.8		4.3		23.7		2.890806452		2346.451612903	
	Daily Max	2.8		4.3		23.7		3.489		3466	
	Daily Max - Variable										
	Daily Min	2.8		4.3		23.7		0.764		1710	
	Geometric Mean										
	Week 1 Avg										
	Week 2 Avg										
	Week 3 Avg										
	Week 4 Avg										
Limit(s) in Effect	Monthly Avg										
	Daily Max										
	Daily Max - Variable										
	Daily Min										
	Geometric Mean										
	Weekly Avg										
QA/QC Information	LOD	1.6		1.3		5.8					
	LOQ	7.5		10		10					
	QC Exceedance	N		N		N		N		N	
	Lab Certification	405132750		405132750		405132750					

	Sample Point	601	601	006	006	006
	Description	River Monitoring	River Monitoring	WLA CBOD5 Discharge Compliance	WLA CBOD5 Discharge Compliance	WLA CBOD5 Discharge Compliance
	Parameter	399	401	545	12	889
	Description	WLA Previous 4 Day Avg River Flow	WLA Previous Day River Temp	WLA CBOD5 Value	WLA Adjusted Value	WLA CBOD5 Discharged
	Units	cfs	degF	lbs/day	lbs/day	lbs/day
	Sample Type	CALCULATED	CALCULATED	SEE TABLE	CALCULATED	CALCULATED
	Frequency	DAILY	DAILY	DAILY	DAILY	DAILY
Sample Results	Day 1	3330	74	2413	2896	110
	2	3195	72	2709	3251	117
	3	3068	72	2709	3251	107
	4	2749	73	2312	2774	70
	5	2500	74	1960	2352	162
	6	2185	76	1830	2196	47
	7	2172	76	1830	2196	42
	8	2470	74	1960	2352	82
	9	2793	73	2478	2974	55
	10	2970	74	2191	2629	33
	11	2836	75	2191	2629	38
	12	2551	76	2078	2494	80
	13	2233	77	1830	2196	186
	14	2088	78	1667	2000	181
	15	2099	78	1667	2000	168
	16	2099	76	1830	2196	121
	17	2119	76	1830	2196	57
	18	2123	76	1830	2196	63
	19	2154	78	1667	2000	152
	20	2209	78	1667	2000	70
	21	2399	77	1960	2352	37
	22	2718	76	2078	2494	54
	23	2894	76	2191	2629	74
	24	2870	77	2191	2629	29
	25	2690	78	1869	2243	25
	26	2354	78	1758	2110	67
	27	2133	80	1667	2000	30
	28	2098	81	1667	2000	31
	29	2060	81	1667	2000	18
	30	2019	80	1667	2000	28
	31	1975	79	1584	1901	25

	Sample Point	601		601		006		006		006	
	Description	River Monitoring		River Monitoring		WLA CBOD5 Discharge Compliance		WLA CBOD5 Discharge Compliance		WLA CBOD5 Discharge Compliance	
	Parameter	399		401		545		12		889	
	Description	WLA Previous 4 Day Avg River Flow		WLA Previous Day River Temp		WLA CBOD5 Value		WLA Adjusted Value		WLA CBOD5 Discharged	
	Units	cfs		degF		lbs/day		lbs/day		lbs/day	
Summary Values	Monthly Avg	2456.548387097		76.419354839		1966.064516129		2359.225806452		76.096774194	
	Daily Max	3330		81		2709		3251		186	
	Daily Max - Variable									186	
	Daily Min	1975		72		1584		1901		18	
	Geometric Mean										
	Week 1 Avg										
	Week 2 Avg										
	Week 3 Avg										
	Week 4 Avg										
Limit(s) in Effect	Monthly Avg										
	Daily Max										
	Daily Max - Variable									0	0
	Daily Min										
	Geometric Mean										
	Weekly Avg										
QA/QC Information	LOD										
	LOQ										
	QC Exceedance	N		N		N		N		N	
	Lab Certification										

	Sample Point	006	006
	Description	WLA CBOD5 Discharge Compliance	WLA CBOD5 Discharge Compliance
	Parameter	543	542
	Description	WLA 7 Day Sum Of WLA Values	WLA 7 Day Sum Of CBOD5 Discharged
	Units	lbs/day	lbs/day
	Sample Type	CALCULATED	CALCULATED
	Frequency	DAILY	DAILY
Sample Results	Day 1	26633	449
	2	24077	528
	3	22134	582
	4	19794	568
	5	18225	666
	6	16994	664
	7	15763	655
	8	15310	627
	9	15079	565
	10	14561	491
	11	14440	459
	12	14558	377
	13	14558	516
	14	14395	655
	15	14102	741
	16	13454	807
	17	13093	831
	18	12732	856
	19	12321	928
	20	12158	812
	21	12451	668
	22	12862	554
	23	13223	507
	24	13584	479
	25	13623	441
	26	13714	356
	27	13714	316
	28	13421	310
	29	13010	274
	30	12486	228
	31	11879	224

	Sample Point	006		006	
	Description	WLA CBOD5 Discharge Compliance		WLA CBOD5 Discharge Compliance	
	Parameter	543		542	
	Description	WLA 7 Day Sum Of WLA Values		WLA 7 Day Sum Of CBOD5 Discharged	
	Units	lbs/day		lbs/day	
Summary Values	Monthly Avg	15108		552.709677419	
	Daily Max	26633		928	
	Daily Max - Variable			928	
	Daily Min	11879		224	
	Geometric Mean				
	Week 1 Avg				
	Week 2 Avg				
	Week 3 Avg				
	Week 4 Avg				
Limit(s) in Effect	Monthly Avg				
	Daily Max				
	Daily Max - Variable			0	0
	Daily Min				
	Geometric Mean				
	Weekly Avg				
QA/QC Information	LOD				
	LOQ				
	QC Exceedance	N		N	
	Lab Certification				

Footnotes (DNR Use Only; Instructions for completing this form that are unique for your facility may be displayed here.)

General Remarks

Laboratory Quality Control Comments

BOD Blanks Failed: 7-9-15 (0.45ppm), 7-14-15 (-0.35ppm),7-21-15 (0.36ppm),
GGA Failed: 7-10-15 (234ppm),7-31-15 (305ppm)

Submitted by K3vin1 on 08/06/2015 1:50:03 PM